



PRICE, FIFTY COPIATIONS,

GRIER

SOUTHERN

ALMAN

both of the sun.  
steer,  
ear 17  
at 6 h. 26 m. P. M., fu-  
e in all parts of North  
at sunset. It will be  
October, at 9 h. 33 m.,  
the greatest eclipse  
e, and at that point

FOR THE YEAR OF OUR L ..... 25  
..... 7  
..... 6577

1864

..... 21st March  
..... 21st June  
..... 24th September  
..... 21st December

BEING BISSEXTILE OR LEAP YEAR Thursday May 5  
THE FOURTH OF THE WAR FOR Sunday ..... May 15  
AND (UNTIL THE FOURTH OF JULY,) ..... May 23  
..... May 26  
..... May 27

EIGHTY-EIGHTH OF THE INDEPENDENCE OF THE  
UNITED STATES.

CALCULATED FOR THE LATITUDE AND MERIDIAN OF  
AUGUSTA, GA.

Lat. 33deg 30m. N.: Long. 81 deg. 58m. W.

AND WILL SERVE FOR ALL ADJACENT STATES.

By T. P. Ashmore, of Americus Ga

Published for the Trade by

F. H. SINGER, ..... AUGUSTA, GA.

THOS. RICHARDS & SON,

Booksellers & Stationers,

AUGUSTA, GA.,

# MY OF MAN'S BODY, ed to be governed by the CONSTELLATIONS.

ING TO ANCIENT ASTROLOGY.

The Head and Face, ♈ ARIES.



NECK.

BREAST

BOWELS.

SECRETUM

KNEES.

The Feet, ♛ PISCES.

TO SHOW WHERE THE SIGN IS.—First find the day of the month, and against it you have the sign or place of the moon, then finding the sign here, it shows the part of the body it is supposed to govern. The idea that the moon's place or the signs have any effect on the human body ought not to be believed.

## Names and Characters of the Signs of the Zodiac.

- |                            |                          |                     |
|----------------------------|--------------------------|---------------------|
| ♈ Aries, the Ram.          | ♉ Taurus, the Bull.      | ♊ Gemini, the Twins |
| ♋ Cancer, the Crab.        | ♌ Leo, the Lion.         | ♍ Virgo, the Virgin |
| ♎ Libra, the Balance.      | ♏ Scorpio, the Scorpion. |                     |
| ♐ Sagittarius, the Archer. | ♑ Capricornus, the Goat. |                     |
| ♒ Aquarius, the Waterman.  | ♓ Pisces, the Fishes.    |                     |

## Explanation of Characters.

- Planets.—☉ Sun. ♄ Saturn. ♂ Mars. ☾ Moon. ♃ Jupiter.  
♀ Venus. ☿ Earth. ☿ Mercury. ♃ Herschel.
- ☾ New Moon. ♄ First Qr. ☾ Full Moon. ♃ Last Qr.

- ♈ Dragon's Head—Ascending Node. ♄ Conjunction.  
♏ Dragon's Tail—Descending Node. ♂ Opposition.

Apoee.—At the greatest distance from the Earth.

Perigeo.—At the least distance, or nearest the Earth.

# ASTRONOMICAL CALCULATIONS, 3

## ECLIPSES FOR THE YEAR 1864.

During the year 1864 there will be but two Eclipses, both of the sun.

"The moon doth her course so wisely steer,  
That she runs in sunshine all this year."

The first Eclipse will be of the sun on the 5th of May, at 6 h. 28 m. P. M., invisible at Columbus, and vicinity. This Eclipse will be visible in all parts of North America west of the meridian of Houston, Texas.

The Eclipse will commence at Houston, Texas, at about sunset. It will be annular and central in some places and total in others.

The second Eclipse will be that of the sun on the 30th October, at 9 h. 33 m. A. M., invisible at Columbus. It will be visible in Texas, and the greatest eclipse visible in that State will be at the mouth of the Rio Grande, and at that point amount to 1½ digits only.

## CHRONOLOGICAL CYCLES.

|                                |     |                      |       |
|--------------------------------|-----|----------------------|-------|
| Dominical Letter.....          | C&B | Solar Cycle.....     | 25    |
| Epoct (Moon's age) Jan. 1..... | 22  | Roman Indiction..... | 7     |
| Golden Number.....             | 3   | Julian Period.....   | 6 577 |

## CARDINAL POINTS.

|  |               |
|--|---------------|
| Vernal Equinox, (spring begins).....   | 21st March    |
| Summer Solstice, (summer begins).....  | 21st June     |
| Autumnal Equinox, (autumn begins)..... | 23d September |
| Winter Solstice, (winter begins).....  | 21st December |

## FIXED AND MOVABLE FESTIVALS.

|                           |          |                              |         |
|---------------------------|----------|------------------------------|---------|
| Epiphany.....             | Jan. 6   | Ascension Day, Holy Thursday | May 5   |
| Septuagesima Sunday.....  | Jan. 24  | Pentecost, Whit-Sunday.....  | May 15  |
| Quinquagesima Sunday..... | Feb. 7   | Trinity Sunday.....          | May 23  |
| Ash Wednesday.....        | Feb. 10  | Corpus Christi.....          | May 26  |
| St. Patrick.....          | March 17 | 1st Sunday in Advent.....    | Nov. 27 |
| Palm Sunday.....          | March 20 | St. Nicholas.....            | Dec. 6  |
| Good Friday.....          | March 25 | Christmas.....               | Dec. 24 |
| Easter Sunday.....        | March 27 | St. John, Baptist.....       | June 23 |
| Low Sunday.....           | April 30 | St. John Evangelist.....     | Dec. 27 |
| Rogation Sunday.....      | May 10   |                              |         |

## ASPECTS OF THE PLANETS.

Mercury will be visible in the eastern sky on the morning of February 27th about one hour before sunrise, and again in the western sky, August 17, about one hour after sunset.

Venus will be morning star till July 18th, then evening star for the remainder of the year.

Mars will pass through opposition with the sun, Nov. 24th. He will then be nearly as bright as Venus and can be easily distinguished by his red color.

Jupiter will be in opposition with the sun May 18th.

Saturn will be in opposition with the sun April 4th.

## EMBER DAYS.

February 24th, 26th, 27th; May 11th, 13th, 14th; September 21st, 23d, 24th  
December 14th, 16th and 17th.

## THE WEATHER.

It is but just to state to the public that they know as much about the weather for the coming year as we do. No Mathematician or Astronomer, however able in his profession, can possibly "cipher out" the weather. When such predictions are seen in Almanacs they should be regarded as mere guess work, entitled to no confidence, and as likely to fail as to be true; yet, as the people seem determined to have the weather laid down, we have done our best, but you must not blame us if it does not come exactly to the day.

## COMETS.

Table of the most remarkable Cometary Bodies seen since the Christian Era:

| Lengths of Tails<br>Comet of B. C. | in<br>deg. | and miles | years       | Size of the following Comets |
|------------------------------------|------------|-----------|-------------|------------------------------|
| " " A. D.                          | 571        | 604       | 144,000,000 |                              |
| " " "                              | 1450       | 69        | 70,000,000  | Diam. in Miles.              |
| " " "                              | 1618       | 104       | 65,000,000  | 330 Miles                    |
| " " "                              | 1680       | 70        | 124,000,000 | 364 "                        |
| " " "                              | 1690       | 68        | 100,000,000 | 4620 "                       |
| " " "                              | 1744       | 39        | 35,000,000  | 6050 "                       |
| " " "                              | 1769       | 80        | 43,000,000  | 4230 "                       |
| " " "                              | 1811       | 23        | 182,000,000 | 5000 probably                |
| " " "                              | 1843       | 60        | 180,000,000 |                              |

## TABLE OF SOME OF THE PRINCIPAL BODIES IN THE SOLAR SYSTEM.

| NAMES.       | Mean<br>Diameter. | Mean Dis-<br>tance from<br>the Sun. | Revolu-<br>tion ar'd<br>the Sun. | Revolu-<br>tion on<br>Axis. | Veloc-<br>ity per<br>m. in<br>orbit. | Size—the<br>Earth<br>being 1. | Densi-<br>ty—<br>Earth<br>being 1. | Light,<br>Earth<br>being 1. |
|--------------|-------------------|-------------------------------------|----------------------------------|-----------------------------|--------------------------------------|-------------------------------|------------------------------------|-----------------------------|
|              | Miles.            | Miles.                              | yrs. days                        | d. h. M.                    | Miles.                               |                               |                                    | Inf-<br>nite.               |
| THE SUN.     | 883,245           |                                     |                                  | 25 9 59                     |                                      | 1,412,921,101                 | 0.952                              |                             |
| Mercury...   | 3,224             | 36,514,800                          | 88                               | 1 0 8                       | 1,927                                | 0.663                         | 1.139                              | 0.830                       |
| Venus...     | 7,684             | 68,787,000                          | 224                              | 23 21                       | 1,328                                | 0.900                         | 0.923                              | 1.915                       |
| The Earth... | 7,912             | 95,163,000                          | 1                                | 23 56                       | 1,152                                | 1,000                         | 1.000                              | 1.000                       |
| The Moon...  | 2,124             | 95,163,000                          | 1                                | 27 7 43                     | 28                                   | 0.620                         | 0.815                              | 1.000                       |
| Mars...      | 4,183             | 144,903,000                         | 1                                | 521 1 0 37                  | 921                                  | 0.125                         | 0.948                              | 0.431                       |
| Jupiter...   | 86,173            | 484,797,000                         | 11                               | 216 9 56                    | 466                                  | 1,486,000                     | 0.268                              | 0.037                       |
| Saturn...    | 79,842            | 907,105,000                         | 29                               | 167 10 29                   | 343                                  | 771,000                       | 0.138                              | 0.010                       |
| Uranus...    | 28,112            | 1,224,290,000                       | 84                               | 6 1 13 32                   | 259                                  | 29,000                        | 0.242                              | 0.000                       |
| Neptune...   | 41,640            | 2,854,000,000                       | 164                              | 229                         | 208                                  | 143,000                       | 0.140                              | 0.010                       |

NOTE.—There are more than fifty small Planets or Asteroids, between the orbits of Mars and Jupiter.

## EQUINOXES AND SOLSTICES.

|                       |                      |            |
|-----------------------|----------------------|------------|
| Vernal Equinox.....   | (Spring begins)..... | March 21st |
| Summer Solstice.....  | (Summer begins)..... | June 21st  |
| Autumnal Equinox..... | (Autumn begins)..... | Sept. 23d  |
| Winter Solstice.....  | (Winter begins)..... | Dec. 21st  |

## ANSWERS TO THE PROBLEMS FOR 1863.

Problem 1st, 36-53 feet. Prob. 2d, 39.66 feet. Prob. 3d, 2.767. Prob. 4th, 700 lbs. Prob. 5th, 3-640 cubic inches. Prob. 6th, 9 ft. Prob. 7th, 18 ft. Prob. 8th, 23 6 ft. Prob. 9th, 256 feet. Prob. 10th, 12.649 ft. Prob. 11th, 176 ft. Prob. 12th, 49 ft. Prob. 13th, 5.5 seconds. Prob. 14th, 118 ft. Prob. 15th, 3750 lbs. Prob. 16th, 5.924 ft. Prob. 17th, 1656.85 miles. Prob. 18th, 4 ft.

\* Problem 4th was a misprint. It should have been printed thus: 26.65.

## MATHEMATICAL ACKNOWLEDGMENTS FOR 1863.

The problems for 1863, have been ably managed by the following named Mathematicians, whose solutions are here indicated:

Mr. J. M. Cartledge, Newton, Miss.—Problems, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 14, 15, 16, 17, 18.

Mr. Samuel F. Saunders, Seaborough, Ga.—Problems, 1, 2 nearly, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18.

Mr. B. F. Sitton, Gainesville, Ga.—Problems, 1, 2 nearly, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 16, 18, 17, 18.

Mr. George Manzy, Confederate Army, Richmond, Va.—Problems 1, 2, 3, 4, 5 nearly, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18.

Mr. Wm. C. Shields, Military Station, Ga.—Problems, 2 nearly, 3, 7, 8, 11, 12, 13, 15, 17, 18.

Mr. B. M. Sweet, Dawson, Ga.—Problems, 3, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 18, 18.

Mr. Abram Evans, Confederate Army, Goldsboro', N. C.—Problems, 3, 6, 7, 10, 11, 12, 13, 16 nearly, 16, 17, 18.

Mr. John E. Cain, Americus, Ga.—Problems, 2, 5, 8, 11, 12, 13, 16, 18, 17, 18.

Several other persons have solved a few of the problems, but not enough to entitle their solutions to acknowledgment.

## PROBLEMS FOR 1864.

The nine following Problems have been proposed by Mr. Samuel F. Saunders, Scarborough, Ga:

Prob. 1.—What is the length of a straight line that divides a circle  $60$  rods in diameter, into two parts, whose areas are as  $2$  to  $7$ ?

Prob. 2.—Given the chord  $40$  and the arc  $60$ , to find the versed sine.

Prob. 3.—In a square garden there is a spring, from which to three corners, there are  $3$ ,  $9$  and  $7$  rods; how far is it from the other corner?

Prob. 4.—From a spring in a square field to the corners, are  $28$ ,  $28$ ,  $27$  and  $13$  rods, what is the area?

Prob. 5.—If the diameter of the directing circle be  $90$ , and the generating circle  $10$ , what is the area of each epicycloid?

Prob. 6.—If a circle  $4$  feet in diameter, roll around another circle of the same diameter; what will be the area and curve generated by a point in the circumference?

Prob. 7.—The two lines that bisect the acute angles of a right-angled triangle, are  $A$  and  $B$ ; what are the lengths of the sides of the triangle?

Prob. 8.—In a right-angled triangle there are given the side of the inscribed square= $a$ , and the radius of the inscribed circle= $b$ , to find the sides.

Prob. 9.—The diameter of a conical tree is  $4$  feet, its height is  $90$  feet; if a squirrel run spirally  $45$  times around it in going up, how far will it travel?

The four following Problems have been proposed by Mr. J. B. Cartledge, Newton, Miss.

Prob. 10.—What is the difference between the major and minor proportional differences of  $5$  and  $6$ , and the difference of their numerical value?

Prob. 11.—What is the difference between the area of a circle whose radius is  $50$  yards, and its greatest inscribed square?

Prob. 12.—I have an orchard of but  $9$  trees, which are set in  $3$  rows, with  $3$  in each row. Send in a diagram representing the orchard.

Prob. 13.—A, B, and C, purchased a grindstone  $30$  inches in diameter; A paid  $\$3$ ; B  $\$3$ , and C  $\$4$ , according to agreement. A grinds off his share first, then B, and C last; how many inches in diameter must A and B each grind off, to leave C his proportional share, making no allowance for the eye of the stone?

The following Problem has been proposed by Mr. W. C. Shields, Missionary Station, Ga.

Prob. 14.—In a circle containing just  $500$  acres, three other equal circles are inscribed as large as they possibly can be, touching, but not cutting each other; what is the area of each small circle, and what distance apart are their centres, and what distance is between each of their centers, and the center of the large circle, and how much land is left in the large circle, not included in the three small ones?

I propose the following Problems:

Prob. 15.—If the sun's true Longitude be  $L$ , and the Obliquity of the Ecliptic be  $23\frac{1}{2}$ , what will be his Right Ascension and Declination?

Prob. 16.—When the sun's true Longitude is  $60$  deg. what is the Equation of Time?

Prob. 17.—What is the difference between the sine of an arc of  $1$  sec. and the tangent of the same arc of  $1$  sec, radius being  $1$ ?

Prob. 18.—At what hour and minute will the sun rise on the  $21$ st of June, in Lat.  $50$  degrees North?

Prob. 19.—When the moon's Lon. is twenty degrees, and her Lat.  $3$  degrees N. what is her right Ascension and Declination?

Prob. 20.—If the eccentricity of a Planet's orbit be  $0.2534$ ; what is the greatest equation of its center, and what is the Equation when the mean Anomaly equals  $20$  degrees?

Prob. 21.—If the periodical time of a Primary Planet be  $P$ , and the periodical time of its Satellite be  $p$ , and if the distance of the Planet from the sun be  $D$ , and the distance of the Satellite from the Planet be  $d$ ; what will be the mass of the Primary Planet, the sun's mass being  $1$ ?

Prob. 22.—When the distance of a Comet moving in a parabolic orbit, is the same from the sun as that of the Earth; with what velocity will the Comet move, the velocity of the Earth being  $68,000$  miles per hour.

NOTE.—Any person solving ten of the above problems, and sending to me at Americus, Ga., by the  $15$ th of May next, the correct answers to the same, shall have the same acknowledged in the Almanac for  $1865$ . A few nice original Problems are desired for  $1865$ . They must be of the higher order, and solvable only by the higher branches of Analysis. They must be thoroughly solved and explained, in order to meet with attention.

T. P. ASHMORE.

## GOVERNMENT OF THE CONFEDERATE STATES.

**EXECUTIVE CABINET.**—Jefferson Davis, of Miss., President; Alexander H. Stephens, of Ga., Vice-President; J. P. Benjamin, of La., Secretary of State; G. G. Memminger, of S. C., Sec. Treasury; Jas. A. Seddon, of Va., Sec. War; R. S. Mallory, Sec. Navy; John H. Reagan, Postmaster-General; A. T. Watts, Attorney General.

---

| DATES OF SECESSION<br>Of Southern States from the Union. | Representation<br>in Congress. | Electoral<br>Votes, | Population<br>1861. |
|--|--------------------------------|---------------------|---------------------|
| South Carolina, December 20th, 1860.                     | 16                             | 18                  | 715,371             |
| Mississippi, January 9, 1861.                            | 7                              | 9                   | 791,895             |
| Florida, January 10, 1861.                               | 9                              | 4                   | 140,453             |
| Alabama, January 11, 1861.                               | 9                              | 11                  | 964,296             |
| Georgia, January 19, 1861.                               | 10                             | 12                  | 1,057,327           |
| Louisiana, January 26, 1861.                             | 6                              | 8                   | 706,433             |
| Texas, February 1, 1861.                                 | 6                              | 8                   | 601,089             |
| Virginia, April 17, 1861.                                | 16                             | 18                  | 1,516,088           |
| Tennessee, May 6, 1861.                                  | 11                             | 13                  | 1,109,847           |
| Arkansas, May 6, 1861.                                   | 4                              | 6                   | 435,427             |
| North Carolina, May 20, 1861.                            | 10                             | 12                  | 992,637             |
| Missouri, October 28, 1861.                              | 11                             | 13                  | 1,178,317           |
| Kentucky, November 19, 1861.                             | 11                             | 13                  | 1,155,712           |

---

## GOVERNMENT OF GEORGIA.

Capitol—MILLEDGEVILLE.

Area—58,000 Square Miles; - - - Total Population—1,082,797;  
Slaves—467,461.

**EXECUTIVE AND CABINET.**—Joseph E. Brown, Governor; H. H. Waters and J. L. Campbell, Secretaries Ex. Depart't; N. C. Barnett, Sec. State; Peterson Thawentt, Comp. Gen'l; John Jones, Treasurer; H. C. Wayne; Ad'nt and Insp't Gen'l.

---

## GOVERNMENT OF ALABAMA.

Capitol—MONTGOMERY.

Area—50,722 Square Miles; - - - Total Population—935,917;  
Slaves—435,473.

Thos. H. Watts, Governor; P. H. Britton, Secretary of State; W. J. Green, Comptroller; D. B. Graham, Treasurer.

---

## GOVERNMENT OF MISSISSIPPI.

Capitol—JACKSON.

Area—47,156 Square Miles; - - - Total Population—887,158;  
Slaves—479,677.

Chas. Clarke, Governor; Charles A. Brougher, Secretary of State; A. J. Gillespie, Auditor of Public Accounts, M. D. Haynes, State Treasurer; T. J. Wharton, Attorney General.

---

## GOVERNMENT OF SOUTH CAROLINA.

Capitol—COLUMBIA.

Area— — Square Miles; - - - Total Population, 708,812;  
Slaves, 402,541.

M. L. Benjamin, Governor.

1st Month

JANUARY, 1864

31 days

| MOON'S PH.     | D. | H. | M.      |
|----------------|----|----|---------|
| Last Quarter,  | 1  | 9  | 47 eve. |
| New Moon,      | 9  | 2  | 3 mo.   |
| First Quarter, | 15 | 11 | 4 eve.  |
| Full Moon,     | 23 | 4  | 13 eve. |
| Last Quarter,  | 31 | 1  | 30 eve. |

Sun slow.

EQUATION OF TIME.

| D. | M. | S. |
|----|----|----|
| 1  | 37 | 28 |
| 1  | 5  | 7  |
| 1  | 5  | 9  |
| 13 | 8  | 47 |
| 17 | 10 | 13 |
| 21 | 11 | 28 |
| 25 | 12 | 31 |
| 29 | 13 |    |

| D. | D.    | MISCELLANY.                                      | Sun   | Sun  | MOON'S | MOON   |       |
|----|-------|--|-------|------|--------|--------|-------|
| of | of    |  | rises | sets | PLACE. | ri&sts |       |
| M  | W     |  | H.M.  | H.W. |        | H. M.  |       |
| 1  | Frid  | New Year's Day. <i>Cold</i>                      | 7     | 4    | 4 56   | 15     | Morn. |
| 2  | Satur | Sun in Perigee $\epsilon \delta \eta$ <i>and</i> | 7     | 3    | 4 57   |        | 0 5   |
| 3  | S     | 1st Sun. after Christm s <i>windy</i>            | 7     | 3    | 4 57   | 11     | 1 18  |
| 4  | Mon   | $\eta$ rises 4h 4m                               | 7     | 3    | 4 57   |        | 2 40  |
| 5  | Tues  | Moon $\delta \eta \epsilon$ rises 6h30m mo       | 7     | 2    | 4 58   | 1      | 4 0   |
| 6  | Wed   | Epiphany <i>Cloudy and</i>                       | 7     | 2    | 4 59   |        | 5 14  |
| 7  | Thur  | Moon lowest                                      | 7     | 2    | 4 58   | 18     | 6 7   |
| 8  | Frid  | Battle of New Orleans, 1815                      | 7     | 1    | 4 59   |        | 6 45  |
| 9  | Satur | Keep-out of debt this year                       | 7     | 1    | 4 59   |        | sets  |
| 10 | S     | 1st Sund. after Epiph. <i>rainy</i>              | 7     | 0    | 5 0    | 2      | 6 40  |
| 11 | Mon   | Moon in Perigee <i>weather.</i>                  | 7     | 0    | 5 0    | 5      | 7 52  |
| 12 | Tues  | $\eta$ rises 3h 59m                              | 6     | 59   | 5 1    | 18     | 9 0   |
| 13 | Wed   | Patronise home folks.                            | 6     | 59   | 5 1    |        | 10 12 |
| 14 | Thur  | Aldebaran sou 8h 52m <i>Fair</i>                 | 6     | 58   | 5 2    |        | 11 20 |
| 15 | Frid  | The world is full of fools <i>and</i>            | 6     | 58   | 5 2    | 17     | morn  |
| 16 | Satur | Battle Iron-ton, 1862 <i>frosty</i>              | 6     | 57   | 5 3    |        | 0 30  |
| 17 | S     | 2d Sund. after Epiph. <i>morns</i>               | 6     | 57   | 5 3    | 8      | 1 31  |
| 18 | Mon   | Ex-president Tyler died, 1862                    | 6     | 56   | 5 4    |        | 2 25  |
| 19 | Tues  | Bat. Mill Springs '62 <i>Windy</i>               | 6     | 55   | 5 5    |        | 3 15  |
| 20 | Wed   | sun enters $\pi$ <i>and</i>                      | 6     | 55   | 5 5    | 11     | 4 5   |
| 21 | Thur  | Capella sou 9h 3m <i>unpleasant</i>              | 6     | 54   | 5 6    |        | 4 50  |
| 22 | Frid  | Moon highest <i>Cloudy</i>                       | 6     | 54   | 5 6    | 23     | 5 41  |
| 23 | Satur | Get out of debt and keep out                     | 6     | 53   | 5 7    |        | rises |
| 24 | S     | Sept'ma Sund. Moon in Apogee                     | 6     | 52   | 5 8    | 12     | 6 10  |
| 25 | Mon   | Conv'n St. Paul. $\eta \delta$ Infer.            | 6     | 51   | 5 9    |        | 7 15  |
| 26 | Tues  | Sirius sou 10h 16m <i>and cold</i>               | 6     | 51   | 5 9    | 19     | 8 20  |
| 27 | Wed   | Short settlements] <i>and perhaps</i>            | 6     | 50   | 5 10   |        | 9 18  |
| 28 | Thur  | make long friends <i>snow</i>                    | 6     | 49   | 5 11   | 1      | 10 12 |
| 29 | Frid  | Moon $\delta \eta$ <i>or sleet</i>               | 6     | 48   | 5 12   |        | 11 2  |
| 30 | Satur | As you value happiness keep                      | 6     | 48   | 5 12   | 11     | 11 58 |
| 31 | S     | Sexagesima Sund [out of debt                     | 6     | 47   | 5 13   |        | Morn  |



2d Month

FEBRUARY, 1864

29 days

## MOON'S PHASES.

|               | D. | H. | M.      |
|---------------|----|----|---------|
| New Moon      | 7  | 0  | 43 eve. |
| First Quarter | 14 | 1  | 4 eve.  |
| Full Moon     | 22 | 11 | 22 mo.  |

Sun slow

## EQUATION OF TIME.

| P. M. S. | 1 | 11 | 49 | 15 | 29 | 14 | 29 | 17 | 14 | 18 | 56 | 23 | 41 |
|----------|---|----|----|----|----|----|----|----|----|----|----|----|----|
|          | 1 | 13 | 49 | 15 | 29 | 14 | 29 | 17 | 14 | 18 | 56 | 23 | 41 |

| D. of M. | D. of W. | MISCELLANY.                            | Sun rises H. M. | Sun sets M. M. | MOON'S PLACE. | Moon riasts H. M. |
|----------|----------|--|-----------------|----------------|---------------|-------------------|
| 1        | Mon.     | Keep out debt this year <i>Cold</i>    | 6 46            | 5 14           | †             | 0 44              |
| 2        | Tue.     | Purification B. V. M. Moon ♂ ♀         | 6 45            | 5 15           |               | 1 47              |
| 3        | Wed.     | Fort Henry attac'd, '62. <i>with</i>   | 6 44            | 5 16           |               | 2 51              |
| 4        | Thu.     | Moon lowest. <i>High winds.</i>        | 6 44            | 5 16           | ♂             | 3 52              |
| 5        | Fri.     | Moon ♂ ♀ <i>Fair and</i>               | 6 43            | 5 17           |               | 4 48              |
| 6        | Satu.    | Do good when you can <i>frosty.</i>    | 6 42            | 5 18           | ≈             | 5 58              |
| 7        | S.       | Quinquagesima Sun. ☾ in per.           | 6 41            | 5 19           |               | sets.             |
| 8        | Mon.     | Roanoke Isl'd taken, '62 <i>N.E.</i>   | 6 40            | 5 20           |               | 6 42              |
| 9        | Tue.     | Federals at Florence '62 <i>winds</i>  | 6 39            | 5 21           | ✕             | 7 43              |
| 10       | Wed.     | Ash Wednesday. <i>with dark,</i>       | 6 38            | 5 22           |               | 8 50              |
| 11       | Thu.     | Earn your dinner before you            | 6 37            | 5 23           | ♀             | 9 58              |
| 12       | Fri.     | eat it. <i>flying clouds.</i>          | 6 36            | 5 24           |               | 11 0              |
| 13       | Sat.     | Battle Fort Donelson, 1862.            | 6 36            | 5 24           |               | 11 55             |
| 14       | S.       | 1st Sun. in Lent, St. Valentine        | 6 35            | 5 25           | ♂             | morn.             |
| 15       | Mon.     | Sirius sou. 8h 42m. <i>Cloudy</i>      | 6 34            | 5 26           |               | 0 31              |
| 16       | Tue.     | Fort Donelson sur. 1862 <i>and</i>     | 6 33            | 5 27           | □             | 1 15              |
| 17       | Wed.     | God helps them that help them.         | 6 32            | 5 28           |               | 2 0               |
| 18       | Thu.     | ☾ highest. [selves.                    | 6 31            | 5 29           | ☾             | 2 44              |
| 19       | Fri.     | Sun enters ✕ <i>rainy weather.</i>     | 6 30            | 5 30           |               | 3 25              |
| 20       | Sat.     | Do not buy anything on credit.         | 6 29            | 5 31           | Ω             | 4 25              |
| 21       | S.       | 2d Sund. in Lent, Moon in Ap.          | 6 28            | 5 32           |               | 5 45              |
| 22       | Mon.     | Washington born, 1732.                 | 6 27            | 5 33           | ☿             | rises.            |
| 23       | Tue.     | Bat. Buena Vista, '49. <i>chang-</i>   | 6 26            | 5 34           |               | 7 1               |
| 24       | Wed.     | St. Matthias. <i>able and</i>          | 6 25            | 5 35           | ♂             | 7 45              |
| 25       | Thu.     | Moon ♂ ♀. ♀ rises 5 h 3 m.             | 6 24            | 5 36           |               | 8 31              |
| 26       | Frid.    | ♀ greatest elong. w. <i>unpleasant</i> | 6 23            | 5 37           | ☿             | 9 15              |
| 27       | Satu.    | ♀ visible in morn. <i>weather.</i>     | 6 22            | 5 38           |               | 10 6              |
| 28       | S.       | 3d S. in Lent. ♀ 3° 5' a. of ♀.        | 6 21            | 5 39           |               | 11 0              |
| 29       | Mon.     | Moon ♂ ♀ Procyon s. 8h 55 m.           | 6 21            | 5 39           | †             | 11 55             |

3d Month.

MARCH, 1864

31 days

| MOON'S PH. D. H. M. |    |    |         |
|---------------------|----|----|---------|
| Last Quarter        | 1  | 2  | 38 mo.  |
| New Moon            | 7  | 10 | 58 eve. |
| First Quarter       | 15 | 4  | 26 mo.  |
| Full Moon           | 23 | 4  | 54 mo.  |
| Last Quarter        | 30 | 1  | 22 eve. |

Sun slow.

## EQUATION OF TIME.

| D. | M. S. | M. S. |    |    |    |
|----|-------|-------|----|----|----|
|    |       | 1     | 2  | 3  | 4  |
| 1  | 12    | 29    | 36 | 37 | 32 |
| 2  | 11    | 30    | 37 | 32 | 23 |
| 3  | 10    | 30    | 37 | 32 | 11 |
| 4  | 9     | 30    | 37 | 32 | 5  |
| 5  | 8     | 30    | 37 | 32 | 4  |
| 6  | 7     | 30    | 37 | 32 | 4  |
| 7  | 6     | 30    | 37 | 32 | 4  |
| 8  | 5     | 30    | 37 | 32 | 4  |
| 9  | 4     | 30    | 37 | 32 | 4  |
| 10 | 3     | 30    | 37 | 32 | 4  |
| 11 | 2     | 30    | 37 | 32 | 4  |
| 12 | 1     | 30    | 37 | 32 | 4  |

| D. | D of M | W | MISCELLANY.                               | Sun rises H.M. | Sun sets H.M. | MOON'S PLACE. | Moon rises H. M. |
|----|--------|---|---|----------------|---------------|---------------|------------------|
|    |        |   |   |                |               |               |                  |
| 1  | Tues   |   | St. David. ♀ rises 4h. 30m.               | 6 20           | 5 40          | †             | morn.            |
| 2  | Wed    |   | Moon lowest <i>Cloudy and</i>             | 6 19           | 5 41          | ‡             | 1 0              |
| 3  | Thur   |   | Do keep out of debt <i>damp</i>           | 6 18           | 5 42          |               | 2 21             |
| 4  | Frid   |   | Pollux sou. 8h 44m. <i>weather.</i>       | 6 17           | 5 43          | ≈             | 3 36             |
| 5  | Satur  |   | Be economical.                            | 6 16           | 5 44          |               | 4 42             |
| 6  | S.     |   | 4th Sun; in Lent. Moon in Per             | 6 15           | 5 45          |               | 5 31             |
| 7  | Mon    |   | Battle Pea Ridge, 1862.                   | 6 14           | 5 46          | ×             | sets.            |
| 8  | Tues   |   | Battle near Norfolk, 1862.                | 6 13           | 5 47          |               | 6 25             |
| 9  | Wed    |   | Never talk before servants                | 6 12           | 5 48          | ∩             | 7 20             |
| 10 | Thur   |   | Regulus sou. 10h. 44m. <i>Rainy</i>       | 6 11           | 5 49          |               | 8 12             |
| 11 | Frid   |   | He that sells upon trust loses many       | 6 10           | 5 50          |               | 9 2              |
| 12 | Satur  |   | friends and always wants money.           | 6 9            | 5 51          | ♂             | 9 56             |
| 13 | S      |   | 5th Sunday in Lent.                       | 6 8            | 5 52          |               | 10 44            |
| 14 | Mon    |   | Procyon S, 8h 1. m, <i>Frost.</i>         | 6 7            | 5 53          | Π             | 11 35            |
| 15 | Tues   |   | Island No. 10 attacked, 1862.             | 6 6            | 5 54          |               | morn.            |
| 16 | Wed    |   | Regulus sou. 10h. 21m.                    | 6 5            | 5 55          |               | 0 26             |
| 17 | Thur   |   | St. Patrick. ♀ highest. <i>Stormy</i>     | 6 4            | 5 56          | ⊖             | 1 22             |
| 18 | Frid   |   | Vega rises 10h. 26m. <i>and</i>           | 6 3            | 5 57          |               | 2 15             |
| 19 | Satur  |   | Pay as you go. <i>unpleasant.</i>         | 6 2            | 5 58          | Ω             | 3 6              |
| 20 | S.     |   | Palm Sunday. ♀ in Apogee,                 | 6 1            | 5 59          |               | 3 48             |
| 21 | Mon    |   | Vernal equinox. Spring begin              | 6 0            | 6 0           | ⊙             | 4 36             |
| 22 | Tues   |   | Fine linen, girls, and gold so bright,    | 5 59           | 6 1           |               | 5 23             |
| 23 | Wed    |   | Choose not to take by candle light.       | 5 58           | 6 2           | ♂             | rises.           |
| 24 | Thur   |   | Moon ♀ $\frac{1}{2}$ <i>Much rain may</i> | 5 57           | 6 3           |               | 7 15             |
| 25 | Frid   |   | Good Friday. Anun B. V. M.                | 5 56           | 6 4           | ♂             | 8 8              |
| 26 | Satur  |   | Lady's Day. <i>now be</i>                 | 5 55           | 6 5           |               | 9 3              |
| 27 | S.     |   | Easter Sunday. <i>expected.</i>           | 5 54           | 6 6           | †             | 9 57             |
| 28 | Mon    |   | Easter Monday. Moon ♀ $\frac{1}{4}$       | 5 53           | 6 7           |               | 10 48            |
| 29 | Tues   |   | Shrove Tuesday. Moon lowest               | 5 52           | 6 8           | ‡             | 11 42            |
| 30 | Wed    |   | Regulus S. 9 h 26 m.                      | 5 51           | 6 9           |               | morn.            |
| 31 | Thur   |   | ♂ rises 6h. 26m.                          | 5 50           | 6 10          |               | 0 35             |

4th Month

APRIL, 1864

30 days

## MOON'S PHASES.

D. H. M.

New Moon 6 8. 49. mo.

First Quarter 13 8 27 eve.

Full Moon 21 7 55 eve.

Last Quarter 28 10 0 eve.

Sun slow.

## EQUATION OF TIME.

D. M. S.

13 49

5 2 49

9 1 37

13 0. 29

17 1 26

21 1 26

25 2 11

29 2 49

| D. of M | D. of W | MISCELLANY.                           | Sun rises | Sun sets | MOON'S PLACE. | Moon rises |
|---------|---------|---------------------------------------|-----------|----------|---------------|------------|
|         |         |                                       | H. M.     | H. M.    | H. M.         | H. M.      |
| 1       | Frid    | All Fool's Day. <i>Fair</i>           | 5 49      | 6 11     | ♈             | 1 31       |
| 2       | Satur   | Moon in Perigee: <i>and</i>           | 5 48      | 6 12     |               | 2 28       |
| 3       | S       | Low Sunday. ♀ ☉ sup. <i>mild.</i>     | 5 47      | 6 13     | ♋             | 3 24       |
| 4       | Mon     | ♂ ☉. ♀ ri. at sunset.                 | 5 46      | 6 14     |               | 4 20       |
| 5       | Tues    | Moon ☉ ♀ <i>Cloudy and</i>            | 5 45      | 6 15     |               | 5 15       |
| 6       | Wed     | Battle Shiloh, 1862. <i>some</i>      | 5 44      | 6 16     | ♌             | sets.      |
| 7       | Thur    | Island No. 10 sur. 1862. <i>rain.</i> | 5 43      | 6 17     |               | 7 37       |
| 8       | Frid    | The worst wheel of the cart.          | 5 42      | 6 18     | ♍             | 8 29       |
| 9       | Satur   | makes the most noise.                 | 5 41      | 6 19     |               | 9 22       |
| 10      | S.      | 2nd Sunday after Easter. [luck        | 5 40      | 6 20     | ♎             | 10 12      |
| 11      | Mon     | Diligence is the mother of good       | 5 39      | 6 21     |               | 11 4       |
| 12      | Tues    | Regulus sou. 8h. 35m. <i>Cool</i>     | 5 38      | 6 22     |               | 11 57      |
| 13      | Wed     | ☉ highest. <i>mornings,</i>           | 5 37      | 6 23     | ♏             | morn.      |
| 14      | Thur    | Battle Fort Sumter 1861.              | 5 36      | 6 24     |               | 0 42       |
| 15      | Frid    | ☉ and clock agree. <i>cloudy</i>      | 5 35      | 6 25     | ♐             | 1 28       |
| 16      | Satur   | ☉ in Apogee. <i>and</i>               | 5 34      | 6 26     |               | 2 15       |
| 17      | S.      | Ben. Franklin died 1790. <i>damp</i>  | 5 33      | 6 27     | ♑             | 3 6        |
| 18      | Mon     | Spica sou 11h. 27m.                   | 5 32      | 6 28     |               | 3 40       |
| 19      | Tues    | Bat. Lexington, 1775. <i>Look out</i> | 5 31      | 6 29     | ♒             | 4 25       |
| 20      | Wed     | Sun enters ♈. ☉ ☉ ♀ for frosts.       | 5 30      | 6 30     |               | 5 0        |
| 21      | Thur    | Well done is better than well         | 5 29      | 6 31     | ♓             | rises.     |
| 22      | Frid    | ☉'s greatest elong'n E. [said.        | 5 28      | 6 32     |               | 7 35       |
| 23      | Satu    | St. George.                           | 5 27      | 6 33     | ♈             | 8 33       |
| 24      | S.      | Moon ☉ ♀. Brazil discov. 1500         | 5 26      | 6 34     |               | 9 28       |
| 25      | Mon     | St. Mark. <i>Fair</i>                 | 5 25      | 6 35     |               | 10 15      |
| 26      | Tues    | Moon lowest. <i>and</i>               | 5 24      | 6 36     | ♉             | 11 2       |
| 27      | Wed     | Keep out of debt. <i>pleasant.</i>    | 5 23      | 6 37     |               | 11 48      |
| 28      | Thur    | Wolfe killed, 1759.                   | 5 22      | 6 38     | ♊             | morn.      |
| 29      | Frid    | Moon in Perigee.                      | 5 21      | 6 39     |               | 0 40       |
| 30      | Satur   | Washington inaug. 1789.               | 5 20      | 6 40     | ♋             | 1 25       |

5th Month

MAY, 1864

31 days

## MOON'S PHASES.

|               | D. | H. | M.      |
|---------------|----|----|---------|
| New Moon      | 5  | 6  | 46 eve. |
| First Quarter | 13 | 0  | 47 eve. |
| Full Moon     | 21 | 7  | 49 mo.  |
| Last Quarter  | 28 | 5  | 19 mo.  |

Sun fast.

## EQUATION OF TIME.

| D. | M. | S. |
|----|----|----|
| 1  | 3  | 30 |
| 2  | 3  | 30 |
| 3  | 3  | 30 |
| 4  | 3  | 30 |
| 5  | 3  | 30 |
| 6  | 3  | 30 |
| 7  | 3  | 30 |
| 8  | 3  | 30 |
| 9  | 3  | 30 |
| 10 | 3  | 30 |
| 11 | 3  | 30 |
| 12 | 3  | 30 |
| 13 | 3  | 30 |
| 14 | 3  | 30 |
| 15 | 3  | 30 |
| 16 | 3  | 30 |
| 17 | 3  | 30 |
| 18 | 3  | 30 |
| 19 | 3  | 30 |
| 20 | 3  | 30 |
| 21 | 3  | 30 |
| 22 | 3  | 30 |
| 23 | 3  | 30 |
| 24 | 3  | 30 |
| 25 | 3  | 30 |
| 26 | 3  | 30 |
| 27 | 3  | 30 |
| 28 | 3  | 30 |
| 29 | 3  | 30 |
| 30 | 3  | 30 |
| 31 | 3  | 30 |

| D. | D.    | MISCELLANY                          | Sun   | Sun  | MOON'S | Moon   |
|----|-------|-------------------------------------|-------|------|--------|--------|
| of | of    |                                     | rises | sets | PLACE. | ri&sts |
| M  | W     |                                     | H.M.  | H.M. |        | H. M.  |
| 1  | S.    | St. Ph. & St. Ja. Rogation Sund.    | 5 20  | 6 40 | ♈      | 2 15   |
| 2  | Mon   | Spica sou, 10h 38m. <i>Fair and</i> | 5 19  | 6 41 |        | 3 0    |
| 3  | Tues  | Pay what you owe. <i>mild.</i>      | 5 18  | 6 42 | ♉      | 3 52   |
| 4  | Wed   | ♈ rises 7h 19m. Moon ♂ ♀.           | 5 17  | 6 43 |        | 4 44   |
| 5  | Thur  | Ascension Day. Holy Thursd          | 5 16  | 6 44 | ♊      | sets.  |
| 6  | Frid  | Bat. Wil'rg, '62. [♈ Ecli.invis.    | 5 15  | 6 45 |        | 7 47   |
| 7  | Satur | Battle West Point, Va. 1862.        | 5 15  | 6 45 |        | 8 30   |
| 8  | S.    | Bat. Palo Alto, '46. <i>Warm</i>    | 5 14  | 6 46 | ♋      | 9 15   |
| 9  | Mon   | ♈ rises 7h. 3m. <i>and</i>          | 5 13  | 6 47 |        | 9 52   |
| 10 | Tues  | Moon highest. <i>dry.</i>           | 5 12  | 6 48 | ♌      | 10 31  |
| 11 | Wed   | St. Louis massacre, 1861.           | 5 12  | 6 48 |        | 11 3   |
| 12 | Thur  | Moon in Apogee.                     | 5 11  | 6 49 | ♍      | 11 36  |
| 13 | Frid  | ♈ Sun.                              | 5 10  | 6 50 |        | morn.  |
| 14 | Satur | Never buy on credit. <i>Showers</i> | 5 9   | 6 51 | ♎      | 0 6    |
| 15 | S.    | Pentecost. Whit-Sunday.             | 5 9   | 6 51 |        | 0 41   |
| 16 | Mon   | Whit-Monday.                        | 5 8   | 6 52 | ♏      | 1 20   |
| 17 | Tues  | Moon ♂ ♀ <i>Rain,</i>               | 5 7   | 6 53 |        | 2 4    |
| 18 | Wed   | Arcturus sou. 10h 21m <i>with</i>   | 5 7   | 6 53 |        | 2 48   |
| 19 | Thur  | Cuba discovered 1494. <i>wind</i>   | 5 6   | 6 54 | ♐      | 3 21   |
| 20 | Frid  | Sun enters ♏. <i>and thunder.</i>   | 5 5   | 6 55 |        | 4 35   |
| 21 | Satur | Always endeavor to do right.        | 5 5   | 6 55 | ♑      | rises. |
| 22 | S.    | Trinity Sunday. ♈ ♂ Sun, Inf.       | 5 4   | 6 56 |        | 8 25   |
| 23 | Mon   | Moon lowest.                        | 5 4   | 6 56 | ♒      | 9 8    |
| 24 | Tues  | Battle Front Royal, 1862.           | 5 3   | 6 57 |        | 9 50   |
| 25 | Wed   | ♈ in Per. Bat. Winchester, '62.     | 5 3   | 6 57 | ♓      | 10 31  |
| 26 | Thur  | Corpus Christi. <i>Pleasant</i>     | 5 2   | 6 58 |        | 11 10  |
| 27 | Frid  | Arcturus s. 9h 46m. <i>weather.</i> | 5 2   | 6 58 |        | 11 45  |
| 28 | Satur | 1st En.newspaper print. 1576.       | 5 1   | 6 59 | ♈      | morn.  |
| 29 | S.    | 1st Sunday-after Trinity.           | 5 1   | 6 59 |        | 0 10   |
| 30 | Mon   | Joan of Arc burnt 1431.             | 5 0   | 7 0  |        | 0 46   |
| 31 | Tues  | Battle Seven Pines, 1862.           | 5 0   | 7 0  | ♉      | 1 15   |

6th Month

JUNE, 1864

30 days

## MOON'S PHASES.

|               | D. | H. | M.      |
|---------------|----|----|---------|
| New Moon      | 4  | 5  | 56 mo.  |
| First Quarter | 12 | 5  | 22 mo.  |
| Full Moon     | 19 | 5  | 15 eve. |
| Last Quarter  | 26 | 0  | 14 eve. |

Sun fast.

## EQUATION OF TIME.

| M. S. | D. | H. | M. |
|-------|----|----|----|
| 26    | 1  | 5  | 9  |
| 47    | 1  | 5  | 9  |
| 3     | 13 | 0  | 14 |
| 14    | 17 | 1  | 36 |
| 36    | 21 | 1  | 29 |
| 20    | 25 | 2  | 20 |
| 10    | 29 | 3  | 10 |

| D. of M. | D. of W. | MISCELLANY.                            | Sun rises H. M. | Sun sets H. M. | MOON'S PLACE | Moon rises H. M. |
|----------|----------|--|-----------------|----------------|--------------|------------------|
| 1        | Wed      | Once more, keep out of debt.           | 4 59 7          | 1 8            |              | 2 8              |
| 2        | Thur     | Arcturus sou 9h 27m. <i>Rainy.</i>     | 4 58 7          | 1              |              | 2 50             |
| 3        | Frid     | Moon ♂ ♀.                              | 4 58 7          | 2 II           |              | 3 43             |
| 4        | Satur    | Bat. Friedburg, 1745. <i>Fine</i>      | 4 58 7          | 2              |              | sets.            |
| 5        | S.       | 2d S. after Trinity. ☾ highest.        | 4 58 7          | 2 ☽            |              | 8 21             |
| 6        | Mon      | Bat. Memphis 1862. <i>growing</i>      | 4 57 7          | 3              |              | 9 3              |
| 7        | Tues     | Mahomet died. 632. <i>weather.</i>     | 4 57 7          | 3 Ω            |              | 9 38             |
| 8        | Wed      | Moon in Apogee.                        | 4 57 7          | 3              |              | 10 11            |
| 9        | Thur     | Battle Port Republic, 1862.            | 4 57 7          | 3              |              | 10 42            |
| 10       | Frid     | Battle Bethel Church, 1861.            | 4 56 7          | 4 ☿            |              | 11 20            |
| 11       | Satur    | St. Barnabas.                          | 4 56 7          | 4              |              | 11 56            |
| 12       | S.       | 3d Sunday after Trinity.               | 4 56 7          | 4 =            |              | Morn.            |
| 13       | Mon      | Moon ♂ ♀. Bat. Ghent, 1794.            | 4 56 7          | 4              |              | 0 44             |
| 14       | Tues     | Arcturus sou. 8h. 37m.                 | 4 56 7          | 4 ♏            |              | 1 30             |
| 15       | Wed      | Sun and clock agree. <i>Warm.</i>      | 4 56 7          | 4              |              | 2 8              |
| 16       | Thur     | Moon ♂ ♀ 8h 0m eve.                    | 4 55 7          | 5 †            |              | 2 39             |
| 17       | Frid     | Battle Bunker Hill, 1775.              | 4 55 7          | 5              |              | 3 21             |
| 18       | Satur    | Battle Waterloo, 1815.                 | 4 55 7          | 5              |              | 4 10             |
| 19       | S.       | 4th Sunday after Trinity.              | 4 55 7          | 5 ♊            |              | rises.           |
| 20       | Mon      | Q. Victoria crowned, 1837.             | 4 55 7          | 5              |              | 7 58             |
| 21       | Tues     | Summer Solstice. Sun ent. ☊.           | 4 55 7          | 5              |              | 8 41             |
| 22       | Wed      | Moon in Perigee. <i>Rain with</i>      | 4 55 7          | 5 ≈            |              | 9 22             |
| 23       | Thur     | Bat. Springfield, 1780. <i>thunder</i> | 4 55 7          | 5              |              | 10 3             |
| 24       | Frid     | St. John Baptist. Midsummer            | 4 55 7          | 5 ☾            |              | 11 25            |
| 25       | Satur    | Battle Bannockburn, 1314.              | 4 55 7          | 5              |              | 11 54            |
| 26       | S.       | Bat. Mechanicsville, 1862.             | 4 55 7          | 5              |              | Morn.            |
| 27       | Mon      | Cholera in New York, 1832.             | 4 56 7          | 4 ♎            |              | 0 34             |
| 28       | Tues     | ♂ gr.e.W. Jas. Madison d. '36.         | 4 56 7          | 4              |              | 1 3              |
| 29       | Wed      | St. Peter. Henry Clay died '52.        | 4 56 7          | 4 8            |              | 1 37             |
| 30       | Thur     | Montezuma died 1520.                   | 4 56 7          | 4              |              | 2 8              |

7th Month

JULY, 1864

31 days

## MOON'S PHASES.

|               | D. | H. | M.      |
|---------------|----|----|---------|
| New Moon      | 3  | 6  | 41 eve. |
| First Quarter | 11 | 6  | 43 eve. |
| Full Moon     | 19 | 0  | 54 mo.  |
| Last Quarter  | 25 | 8  | 4 eve.  |

Sun slow.

## EQUATION OF TIME.

| D. | M. | S. |
|----|----|----|
| 1  | 3  | 33 |
| 5  | 4  | 16 |
| 9  | 4  | 54 |
| 13 | 5  | 26 |
| 17 | 5  | 50 |
| 21 | 6  | 6  |
| 25 | 6  | 13 |
| 29 | 6  | 10 |

| D<br>of<br>M | D.<br>of<br>W | MISCELLANY.                    | Sun<br>rises | Sun<br>sets | MOON'S<br>PLACE | Moon<br>rises | sets |
|--------------|---------------|--------------------------------|--------------|-------------|-----------------|---------------|------|
|              |               |                                | H. M.        | H. M.       |                 | H. M.         |      |
| 1            | Frid          | Battle Richmond, 1892.         | 4 56         | 7 4         | ∞               | 2 43          |      |
| 2            | Satur         | Sun in Apogee. Warm            | 4 56         | 7 4         | II              | 3 50          |      |
| 3            | S.            | Moon ♂ ♀ Fort Erie taken '14   | 4 57         | 7 3         |                 | sets.         |      |
| 4            | Mon           | Independence, 1776. and        | 4 57         | 7 3         | ☾               | 7 48          |      |
| 5            | Tues          | ☾ highest. dry.                | 4 57         | 7 3         |                 | 8 31          |      |
| 6            | Wed           | ☾ in Apogee.                   | 4 58         | 7 2         | ☾               | 9 15          |      |
| 7            | Thur          | Sheridan died, 1816.           | 4 58         | 7 2         |                 | 9 58          |      |
| 8            | Frid          | Arcturus so. 9h 12m. Cloudy    | 4 58         | 7 2         | ☾               | 10 42         |      |
| 9            | Satur         | Pres. Taylor died 1850. with   | 4 59         | 7 1         |                 | 11 12         |      |
| 10           | S.            | 7th Sunday after Trinity. some | 4 59         | 7 1         | ☾               | 11 57         |      |
| 11           | Mon           | ☾ ♂ ♀ rain.                    | 4 59         | 7 1         |                 | morn.         |      |
| 12           | Tues          | Altair sou 0h 19m.             | 5 07         | 0 0         | ☾               | 0 38          |      |
| 13           | Wed           | Pay as you go. Hot             | 5 07         | 0 0         |                 | 1 12          |      |
| 14           | Thur          | Moon ♂ ♀ Birming, Riot 1791    | 5 16         | 59 7        |                 | 1 42          |      |
| 15           | Frid          | Antares sou 8h 44m. and        | 5 16         | 59          |                 | 2 10          |      |
| 16           | Satur         | Moon low. Hegira begins 622    | 5 26         | 58          |                 | 2 54          |      |
| 17           | S             | ☿ ♂ Sun Sup. unpleasant        | 5 26         | 58          | ☿               | 3 25          |      |
| 18           | Mon           | ♀ ♂ Sun Superior. Cloudy       | 5 36         | 57          |                 | 4 21          |      |
| 19           | Tues          | Moon 16 days old. and          | 5 36         | 57          | ☾               | rises.        |      |
| 20           | Wed           | Moon in Perigee.               | 5 46         | 56          |                 | 8 0           |      |
| 21           | Thur          | Battle Manassas Junction, 1861 | 5 56         | 55          | ☾               | 8 50          |      |
| 22           | Frid          | Sun enters ☾. perhaps          | 5 56         | 55          |                 | 9 31          |      |
| 23           | Satur         | Rog. Sherman died 1793 rain.   | 5 66         | 54          |                 | 10 24         |      |
| 24           | S.            | Vega sou 10h 20m.              | 5 66         | 54          | ☿               | 11 10         |      |
| 25           | Mon           | St. James.                     | 5 76         | 53          |                 | morn.         |      |
| 26           | Tues          | St. Anne. Hot and              | 5 86         | 52          | ☿               | 0 2           |      |
| 27           | Wed           | Bat. Talav. 1809. unpleasant   | 5 86         | 52          |                 | 0 42          |      |
| 28           | Thur          | Dog days begin. rain and       | 5 96         | 51          |                 | 1 12          |      |
| 29           | Frid          | Vega sou 10h 0m, perhaps       | 5 106        | 50          | II              | 2 2           |      |
| 30           | Satur         | Wm. Penn died 1716. hail.      | 5 116        | 49          |                 | 2 48          |      |
| 31           | S.            | Moon highest.                  | 5 116        | 49          | ☾               | 3 33          |      |

8th Month

AUGUST, 1864

31 days

## MOON'S PHASES.

|               | D. | H. | M. |     |
|---------------|----|----|----|-----|
| New Moon      | 2  | 9  | 12 | mo. |
| First Quarter | 10 | 7  | 23 | mo  |
| Full Moon     | 17 | 8  | 2  | mo. |
| Last Quarter  | 24 | 8  | 49 | mo. |

Sun slow

## EQUATION OF TIME.

| P. M. S. | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9 | 10 | 11 | 12 |
|----------|----|----|----|----|----|----|----|----|---|----|----|----|
|          | 16 | 55 | 40 | 55 | 11 | 33 | 46 | 17 | 3 | 51 | 49 | 40 |

| D. | D     | MISCELLANY                               | Sun   | Sun   | MOON'S | Moon   |
|----|-------|--|-------|-------|--------|--------|
| of | of    |  | rises | sets  | PLACE. | ri&sts |
| M  | W     |  | H. M. | H. M. |        | H. M.  |
| 1  | Mon   | Battle of the Nile 1798.                 | 5 12  | 6 48  | ☾      | 4 21   |
| 2  | Tues  | ☾ in Apogee. <i>Rainy</i>                | 5 13  | 6 47  | ☾      | Sets.  |
| 3  | Wed   | Crown Point taken. 1759.                 | 5 13  | 6 47  |        | 7 40   |
| 4  | Thur  | Battle Brownstown, 1812.                 | 5 14  | 6 46  | ☾      | 8 25   |
| 5  | Frid  | Bat Baton Rouge, 1862. <i>sultry</i>     | 5 15  | 6 45  |        | 9 12   |
| 6  | Satur | Ship Arkansas dest. '62. <i>and</i>      | 5 16  | 6 44  | ☾      | 9 54   |
| 7  | S.    | Moon ☿ ♄..                               | 5 17  | 6 43  |        | 10 38  |
| 8  | Mon   | Canning died 1827. <i>dry.</i>           | 5 17  | 6 43  | ☾      | 11 10  |
| 9  | Tues  | Battle of Oak Hill, Mo., 1861.           | 5 18  | 6 42  |        | 11 56  |
| 10 | Wed   | St. Lawrence. ☾ ☿ ♄.                     | 5 19  | 6 41  | ☾      | Morn.  |
| 11 | Thur  | Lyon's defeat, 1837.                     | 5 20  | 6 40  |        | 0 42   |
| 12 | Frid  | Battle of Antioigne, 1792.               | 5 21  | 6 39  |        | 1 31   |
| 13 | Satur | Moon lowest.                             | 5 22  | 6 38  | ☾      | 2 20   |
| 14 | S.    | 12th Sunday after Trinity.               | 5 22  | 6 38  |        | 3 14   |
| 15 | Mon   | Bonaparte born, 1769.                    | 5 23  | 6 37  | ☾      | 4 2    |
| 16 | Tues  | ☿ greatest elongation E                  | 5 24  | 6 36  |        | 4 40   |
| 17 | Wed   | ☿ visible in the eve'ng.                 | 5 25  | 6 35  |        | Rises. |
| 18 | Thur  | Moon in Perigee. <i>Warm</i>             | 5 26  | 6 34  | ☾      | 7 20   |
| 19 | Frid  | Since thou art not sure of a mi-         | 5 27  | 6 33  |        | 8 2    |
| 20 | Satur | nute, throw not away an hour             | 5 28  | 6 32  | ☾      | 8 45   |
| 21 | S.    | 13th S. after Trinity. <i>and</i>        | 5 29  | 6 31  |        | 9 30   |
| 22 | Mon   | ☿ enters ☿. <i>disagreeable.</i>         | 5 30  | 6 30  |        | 10 25  |
| 23 | Tues  | Time is an herb that cures all diseases. | 5 31  | 6 29  | ☾      | 11 20  |
| 24 | Wed   | St. Bartholomew. <i>Look out</i>         | 5 32  | 6 28  |        | Morn.  |
| 25 | Thur  | He that can travel well <i>for a</i>     | 5 32  | 6 27  | ☾      | 0 12   |
| 26 | Frid  | afoot keeps a good horse. <i>storm</i>   | 5 34  | 6 26  |        | 0 58   |
| 27 | Satur | Moon runs high.                          | 5 35  | 6 25  |        | 1 42   |
| 28 | S.    | 14th Sunday after Trinity.               | 5 36  | 6 24  | ☾      | 2 30   |
| 29 | Mon   | St. John Baptist beheaded.               | 5 37  | 6 23  |        | 3 21   |
| 30 | Tues  | Battle Manassas Junct'n 1862             | 5 38  | 6 22  | ☾      | 4 2    |
| 31 | Wed   | Moon in Apogee.                          | 5 39  | 6 21  |        | 4 45   |

9th Month SEPTEMBER, 1864 30 days

| MOON'S PHASES. |    |   |         |
|----------------|----|---|---------|
| New Moon       | 1  | 1 | 9 mo.   |
| First Quarter  | 3  | 6 | 46 eve. |
| Full Moon      | 15 | 3 | 43 eve. |
| Last Quarter   | 22 | 6 | 0 eve.  |
| New Moon       | 30 | 5 | 39 eve. |

Sun fast.

EQUATION OF TIME.

| M. S. | M. S. | M. S. | M. S. | M. S. | M. S. |
|-------|-------|-------|-------|-------|-------|
| 0     | 15    | 1     | 33    | 2     | 54    |
| 0     | 1     | 33    | 4     | 18    | 42    |
| 1     | 5     | 9     | 13    | 4     | 2     |
| 1     | 5     | 9     | 17    | 5     | 42    |
| 2     | 17    | 0     | 21    | 7     | 0     |
| 2     | 25    | 8     | 29    | 8     | 29    |
| 2     | 29    | 9     | 29    | 9     | 49    |

| D. of M | D. of W | MISCELLANY.                           | Sun rises | Sun sets | MOONS PLACE. | Moon rises |
|---------|---------|---------------------------------------|-----------|----------|--------------|------------|
|         |         |                                       | H.M.      | H.M.     |              | H. M.      |
| 1       | Thur    | ☼ & Clock agree, <i>Fair</i>          | 5 39      | 6 21     | ☾            | sets.      |
| 2       | Frid    | ♂ ♀ London burnt 1666.                | 5 40      | 6 20     |              | 7 0        |
| 3       | Satur   | Moon ♂ ♀. <i>and mild.</i>            | 5 41      | 6 19     | ☾            | 7 50       |
| 4       | S.      | 15th Sunday after Trinity.            | 5 42      | 6 18     |              | 8 39       |
| 5       | Mon     | Dog days end.                         | 5 43      | 6 17     | ☾            | 9 28       |
| 6       | Tues    | Lafayette, born, 1757.                | 5 44      | 6 16     |              | 10 18      |
| 7       | Wed     | Moon ♂ ♀.                             | 5 45      | 6 15     | ☾            | 11 10      |
| 8       | Thur    | Battle Lake George, 1755.             | 5 46      | 6 14     |              | morn.      |
| 9       | Frid    | Luna runs low. <i>rain,</i>           | 5 47      | 6 13     | ☾            | 0 2        |
| 10      | Satur   | Bat. Lake Eric, 1813.                 | 5 48      | 6 12     |              | 0 44       |
| 11      | S.      | 16th Sun. after Trinity. <i>with</i>  | 5 49      | 6 11     | ☾            | 1 30       |
| 12      | Mon     | Gen. Walker exec'd, '60. <i>wind</i>  | 5 50      | 6 10     |              | 2 25       |
| 13      | Tues    | Moon in Perigee. <i>and thunder</i>   | 5 51      | 6 9      |              | 3 35       |
| 14      | Wed     | Moscow burned. 1812.                  | 5 52      | 6 8      | ☾            | 4 55       |
| 15      | Thur    | Surren. of N. Y., 177 6               | 5 53      | 6 7      |              | rises.     |
| 16      | Frid    | Fomalhaut sou. 11h 4m                 | 5 54      | 6 6      | ☾            | 6 40       |
| 17      | Satur   | Battle Sharpsburg, '62                | 5 55      | 6 5      |              | 7 31       |
| 18      | S.      | 17th Sun. aft. Trinity. <i>Stormy</i> | 5 56      | 6 4      | ☾            | 8 22       |
| 19      | Mon     | Battle Iuka, 1862. <i>and bois-</i>   | 5 57      | 6 3      | ☾            | 9 15       |
| 20      | Tues    | Bat. Shepardstown, '62 <i>terous</i>  | 5 58      | 6 2      |              | 10 6       |
| 21      | Wed     | St. Matthews.                         | 5 59      | 6 1      | ☾            | 11 10      |
| 22      | Thur    | Days and nights equal length.         | 6 0       | 6 0      |              | morn.      |
| 23      | Frid    | Aut Equinox. Aut beg. <i>weather</i>  | 6 1       | 5 59     | ☾            | 0 4        |
| 24      | Satur   | Battle Monterey, 1846.                | 6 2       | 5 58     |              | 0 45       |
| 25      | S.      | 18th Sunday after Trinity.            | 6 3       | 5 57     | ☾            | 1 30       |
| 26      | Mon     | Battle of Mesilla, 1861.              | 6 4       | 5 56     | ☾            | 2 15       |
| 27      | Tues    | Moon in Apogee. <i>Fair</i>           | 6 5       | 5 55     | ☾            | 3 2        |
| 28      | Wed     | Do keep out of debt. <i>and</i>       | 6 6       | 5 54     | ☾            | 3 50       |
| 29      | Thur    | St. Michael. <i>pleasant.</i>         | 6 7       | 5 53     |              | 4 54       |
| 30      | Frid    | St. Jerome.                           | 6 8       | 5 52     | ☾            | sets.      |



10th Month OCTOBER, 1864

31 days

## MOON'S PHASES,

|               | D. | H. | M.     |
|---------------|----|----|--------|
| First Quarter | 8  | 5  | 13 mo. |
| Full Moon     | 15 | 0  | 49 mo. |
| Last Quarter  | 22 | 9  | 23 mo. |
| New Moon      | 30 | 9  | 56 mo. |

Sun fast.

## EQUATION OF TIME.

| D. | S. | D. | S. |
|----|----|----|----|
| 1  | 10 | 27 | 5  |
| 5  | 11 | 41 | 9  |
| 9  | 12 | 48 | 13 |
| 13 | 13 | 48 | 17 |
| 17 | 14 | 39 | 21 |
| 21 | 15 | 20 | 25 |
| 25 | 15 | 51 | 29 |
| 29 | 16 | 11 |    |

| D. | D     | MISCELLANY.   | Sun   | Sun   | MOON'S        | MOON   |
|----|-------|---|-------|-------|---------------|--------|
| of | of    |   | rises | sets. | PLACE.        | riasts |
| M. | W     |   | H. M. | H. M. |               | H. M.  |
| 1  | Satur | Moon $\delta \frac{1}{2}$ . $\epsilon \delta \varphi$ . <i>Cool</i> | 6 9   | 5 51  | $\frac{1}{2}$ | 6 31   |
| 2  | S.    | Major Andre exe. 1780. <i>and</i>                                   | 5 10  | 5 50  | $\eta$        | 7 10   |
| 3  | Mon   | Battle Corinth, '62. <i>pleasant</i>                                | 3 11  | 5 49  |               | 7 39   |
| 4  | Tues  | Battle Germantown, 1777.  | 3 12  | 5 48  | $\dagger$     | 8 15   |
| 5  | Wed   | Moon $\delta \frac{1}{4}$ . Brainard d. 1747.                       | 6 13  | 5 47  |               | 9 12   |
| 6  | Thur  | Luna runs low. <i>Cloudy</i>  | 6 14  | 5 46  | $\forall$     | 10 25  |
| 7  | Frid  | Bat. S. Rosa Island '61. <i>and</i>                                 | 5 15  | 5 45  |               | 11 36  |
| 8  | Satur | Battle Perryville, 1862.  | 6 15  | 5 45  |               | morn.  |
| 9  | S.    | 20th Sun. after Trinity. <i>windy</i>                               | 6 16  | 5 43  | $\approx$     | 0 25   |
| 10 | Mon   | Battle Waysaw, 1794.  | 5 17  | 5 42  |               | 1 20   |
| 11 | Tues  | Moon in Perigee <i>Cool</i>   | 6 18  | 5 41  | $\times$      | 2 15   |
| 12 | Wed   | Wm. Penn b. 1745. <i>mornings</i>                                   | 6 19  | 5 40  |               | 3 8    |
| 13 | Thur  | Fomalhaut sou 9h 18m. <i>with</i>                                   | 6 20  | 5 39  | $\varphi$     | 4 46   |
| 14 | Frid  | $\frac{1}{2} \delta \odot$ <i>North-east</i>                        | 6 21  | 5 38  |               | 5 20   |
| 15 | Satur | Bank Panic, 1837.   | 6 22  | 5 37  | $\delta$      | rises. |
| 16 | S.    | Kosciusko died 1817 <i>Winds</i>                                    | 6 23  | 5 36  |               | 6 57   |
| 17 | Mon   | Burgoyne surrendered, 1777.   | 6 24  | 5 35  | $\Pi$         | 7 42   |
| 18 | Tues  | St. Luke. $\epsilon \delta \dagger$ . <i>Frost</i>                  | 6 25  | 5 34  |               | 8 38   |
| 19 | Wed   | Corwallis surrendered 1781.   | 6 26  | 5 33  | $\boxminus$   | 9 31   |
| 20 | Thur  | Battle Navarino, 1827.  | 6 27  | 5 32  |               | 10 23  |
| 21 | Frid  | $\epsilon$ highest. <i>Changeable</i>                               | 6 28  | 5 31  | $\Omega$      | 11 25  |
| 22 | Satur | Fomalhaut sou 8h 43m. <i>but</i>                                    | 6 29  | 5 31  |               | morn.  |
| 23 | S.    | 22d S. after Trinity. $\odot$ ent $\eta$                            | 6 30  | 5 30  |               | 0 20   |
| 24 | Mon   | Moon in Apogee. <i>pleasant</i> .                                   | 6 31  | 5 29  | $\nabla$      | 1 11   |
| 25 | Tues  | 7 *s sou 1h 41m.  | 6 32  | 5 28  |               | 2 3    |
| 26 | Wed   | Do keep out of debt. <i>Look for</i>                                | 6 33  | 5 27  | $\approx$     | 2 46   |
| 27 | Thur  | Fomalhaut s. 9h. 23m. <i>a storm</i> .                              | 6 34  | 5 26  |               | 3 38   |
| 28 | Frid  | St. Sim. and St. Jude. $\epsilon \delta \frac{1}{2}$                | 6 35  | 5 25  | $\eta$        | 4 27   |
| 29 | Satur | $\varphi \delta \frac{1}{4}$ . <i>Windy</i>                         | 6 36  | 5 24  |               | 5 15   |
| 30 | S.    | Sun eclipsed, invisible. <i>and</i>                                 | 6 37  | 5 23  |               | sets.  |
| 31 | Mon   | 7*s sou. <i>and</i>   |       |       |               | 12     |

11th Month NOVEMBER, 1864

30 days

## MOON'S PHASES.

|               | D. | H. | M.      |
|---------------|----|----|---------|
| First Quarter | 6  | 3  | 30 eve. |
| Full Moon     | 13 | 11 | 45 mo.  |
| Last Quarter  | 21 | 3  | 33 mo.  |
| New Moon      | 29 | 1  | 38 mc.  |

Sun fast.

## EQUATION OF TIME.

| D. | M. | S. | D. | M. | S. |
|----|----|----|----|----|----|
| 1  | 16 | 13 | 1  | 16 | 13 |
| 2  | 16 | 15 | 2  | 15 | 59 |
| 3  | 15 | 59 | 3  | 15 | 29 |
| 4  | 15 | 29 | 4  | 14 | 46 |
| 5  | 14 | 46 | 5  | 13 | 49 |
| 6  | 13 | 49 | 6  | 12 | 40 |
| 7  | 12 | 40 | 7  | 11 | 29 |
| 8  | 11 | 29 | 8  | 10 | 11 |

| D. | D     | MISCELLANY.                          | Sun   | Sun  | MOON'S | Moon   |
|----|-------|--------------------------------------|-------|------|--------|--------|
| of | of    |                                      | rises | sets | PLACE. | riestg |
| M  | W     |                                      | H.M.  | H.M. |        | M. M.  |
| 1  | Tues  | All Saint's day. <i>Fair</i>         | 6 39  | 5 21 | ↑      | 6 50   |
| 2  | Wed   | All Souls' day. <i>and</i>           | 6 40  | 5 20 |        | 7 41   |
| 3  | Thur  | ☾ lowest. <i>frosty</i>              | 6 40  | 5 20 | ☿      | 8 54   |
| 4  | Frid  | ☿ rises 5h 57m <i>mornings.</i>      | 6 41  | 5 19 |        | 10 2   |
| 5  | Satur | Battle Warrenton, 1862.              | 6 42  | 5 18 | ≈      | 11 26  |
| 6  | S.    | 24th S. after Trinity. <i>Rainy</i>  | 6 43  | 5 17 |        | morn.  |
| 7  | Mon   | Moon in Perigee. <i>and windy.</i>   | 6 44  | 5 16 |        | 0 15   |
| 8  | Tues  | Seizure of Mason & Slidell '61       | 6 45  | 5 15 | ×      | 1 16   |
| 9  | Wed   | Aldebaran sou 1h 33m <i>Cool</i>     | 6 46  | 5 14 |        | 2 21   |
| 10 | Thur  | Milton died, 1674.                   | 6 46  | 5 14 | ☿      | 3 28   |
| 11 | Frid  | Aldebaran sou 1h 23m                 | 6 47  | 5 13 |        | 4 35   |
| 12 | Satur | Be economical. <i>Fair</i>           | 6 48  | 5 12 |        | 5 49   |
| 13 | S.    | Meteor shower, '33 & '37 <i>and</i>  | 6 49  | 5 11 | ☿      | rises. |
| 14 | Mon   | Chas. Carroll d., 1832. <i>mild</i>  | 6 49  | 5 11 |        | 6 11   |
| 15 | Tues  | Sirius rises 9h 57m                  | 6 50  | 5 10 | ☿      | 6 58   |
| 16 | Wed   | Tea dest'd Boston, 1773 <i>Fair</i>  | 6 51  | 5 9  |        | 7 48   |
| 17 | Thur  | Moon highest. <i>and</i>             | 6 52  | 5 8  | ☿      | 8 35   |
| 18 | Frid  | ☿ rises 5h 20m <i>frosty.</i>        | 6 52  | 5 8  |        | 9 28   |
| 19 | Satur | 7 Stars sou. 11h 1m.                 | 6 52  | 5 7  |        | 10 21  |
| 20 | S.    | 26th S. after Trinity. <i>Cloudy</i> | 6 54  | 5 6  | ☿      | 11 26  |
| 21 | Mon   | Berlin decree 1806. <i>and</i>       | 6 54  | 5 6  |        | morn.  |
| 22 | Tues  | ☿ enters ♄. <i>perhaps</i>           | 6 55  | 5 5  | ☿      | 0 20   |
| 23 | Wed   | St. Clement. <i>a heavy</i>          | 6 56  | 5 4  |        | 1 15   |
| 24 | Thur  | ☿ ☿ ☿ <i>rain.</i>                   | 6 56  | 5 4  | ☿      | 2 12   |
| 25 | Frid  | ☿ ☿ ☿                                | 6 57  | 5 3  |        | 3 5    |
| 26 | Satur | O. Elsworth died 1807. <i>Cold</i>   | 6 58  | 5 2  | ☿      | 3 52   |
| 27 | S     | Advent Sunday. <i>winds.</i>         | 6 58  | 5 2  |        | 4 48   |
| 28 | Mon   | Washington crossed Del 1776          | 6 59  | 5 1  | ☿      | 5 58   |
| 29 | Tues  | Moon ☿ 24                            | 6 59  | 5 1  |        | sets.  |
| 30 | Wed   | St. Andrew's Day. Moon low           | 7 0   | 5 0  | ☿      | 6 25   |

12th Month DECEMBER, 1864 31 days

MOON'S PHASES.

|                | D  | H. | M.      |
|----------------|----|----|---------|
| First Quarter, | 6  | 1  | 51 m.o. |
| Full Moon,     | 13 | 1  | 17 mo.  |
| Last Quarter,  | 20 | 10 | 50 eve. |
| New Moon,      | 28 | 3  | 47 eve. |

Sun fast.


EQUATION OF TIME.

| S. | S. | S. | S. | S. | S. | S. | S. |
|----|----|----|----|----|----|----|----|
| 11 | 10 | 35 | 5  | 9  | 13 | 17 | 21 |
| M. | M. | M. | M. | M. | M. | M. | M. |
| 1  | 10 | 35 | 5  | 9  | 13 | 17 | 21 |
| 2  | 8  | 59 | 7  | 13 | 17 | 21 | 25 |
| 3  | 7  | 13 | 5  | 21 | 17 | 21 | 25 |
| 4  | 5  | 21 | 3  | 24 | 17 | 21 | 25 |
| 5  | 3  | 24 | 1  | 25 | 21 | 25 | 29 |
| 6  | 1  | 25 | 29 |    |    |    |    |

| D. | of    | MISCELLANY.                              | Sun rises | Sun sets | MOON'S PLACE. | Moon rises & sets |
|----|-------|--|-----------|----------|---------------|-------------------|
| M. | W.    |  | H.M.      | H.M.     |               | H. M.             |
| 1  | Thur  | Jupiter conjunction with Sun.            | 7 05      | 0        | ♊             | 7 23              |
| 2  | Frid  | 7 Stars south 10h 50m. <i>Windy</i>      | 7 14      | 59       |               | 8 15              |
| 3  | Satur | John Brown hung, 1859 <i>and</i>         | 7 14      | 59       | ♋             | 9 20              |
| 4  | S.    | 3d Sunday in Advent, <i>cold.</i>        | 7 24      | 58       |               | 10 35             |
| 5  | Mon   | Moon in Perigee.                         | 7 24      | 58       |               | 11 46             |
| 6  | Tues  | Van Buren born, 1782.                    | 7 24      | 58       | ♌             | morn.             |
| 7  | Wed   | 7 Stars south 10h 30m.                   | 7 34      | 57       |               | 0 42              |
| 8  | Thur  | Theo Sedwick died 1859.                  | 7 34      | 57       | ♍             | 1 48              |
| 9  | Frid  | Father Mathew d. '56. <i>Cloudy</i>      | 7 34      | 57       |               | 2 58              |
| 10 | Satur | Dr. Chalmers died, '34. <i>and</i>       | 7 34      | 57       |               | 4 1               |
| 11 | S.    | 3d Sun. in Advent. <i>damp.</i>          | 7 44      | 56       | ♎             | 5 11              |
| 12 | Mon   | Great Comet 1680.                        | 7 44      | 56       |               | 6 10              |
| 13 | Tues  | Battle Fredericksburg, 1862.             | 7 44      | 56       | ♏             | rises.            |
| 14 | Wed   | Battle Kingston, 1862.                   | 7 44      | 56       | ♐             | 6 20              |
| 15 | Thur  | Isaac Walton d. 1683, <i>Rainy</i>       | 7 44      | 56       |               | 7 24              |
| 16 | Frid  | Moon highest. <i>and</i>                 | 7 54      | 55       | ♑             | 8 31              |
| 17 | Satur | Bat. Goldsboro', 1862. <i>windy</i>      | 7 54      | 55       |               | 9 35              |
| 18 | S.    | 4th S in Adv, Moon in Apogee             | 7 54      | 55       | ♒             | 10 42             |
| 19 | Mon   | Rome burned, 69. <i>Frosty</i>           | 7 54      | 55       |               | 11 50             |
| 20 | Tues  | Shortest days. <i>and bracing</i>        | 7 54      | 55       | ♓             | morn.             |
| 21 | Wed   | St Thomas. Winter Solstice.              | 7 54      | 55       |               | 0 45              |
| 22 | Thur  | Shortest days <i>weather.</i>            | 7 54      | 55       | ♈             | 1 32              |
| 23 | Frid  | Sir I. Newton born, 1642                 | 7 54      | 55       |               | 2 26              |
| 24 | Satur | Sun & clock agree.                       | 7 54      | 55       | ♉             | 3 17              |
| 25 | S.    | CHRISTMAS DAY. <i>Cloudy</i>             | 7 54      | 55       |               | 4 15              |
| 26 | Mon   | St. Stephen. <i>and rainy.</i>           | 7 54      | 55       | ♊             | 5 12              |
| 27 | Tues  | St John the Evangelist.                  | 7 44      | 56       |               | 6 0               |
| 28 | Wed   | Holy Innocents Moon lowest.              | 7 44      | 56       | ♋             | sets.             |
| 29 | Thur  | As a last request we do implore you      | 7 44      | 56       |               | 6 1               |
| 30 | Frid  | to go and pay what you owe <i>Cold</i>   | 7 44      | 56       | ♌             | 6 52              |
| 31 | Satur | and never go in debt again <i>Battle</i> | 7 44      | 56       |               | 7 56              |

## GARDEN WORK FOR 1864.

## JANUARY.

To realise the sweets of summer, autumn and fall, the foundation must now be laid. Work everything in the shape of decomposing manure into the garden patch that you can lay hold on. The coarser the manure the better. Cover it under. Apply all the ashes, hen manure, &c., about your premises to the garden grounds before it is leached away and wasted. Turn it under and you have it safe. Plant out the onion, leek and garlick, and put the ground in order for February planting. Sow early varieties of English Peas during the first fortnight in January, and continue to sow a succession every week during the spring and early summer. Cabbages, Lettuce, Radishes, Salsify, Spinach, Parsnips, Beets, &c., may now be sown on ground properly prepared. Choose a warm exposure—spade, manure and pulverise your beds well, and do not plant your seed too deep. Irish Potatoes may now be planted for an early crop.  Prepare all your garden implements for use this month.

## FEBRUARY.

The operations of the gardener must now commence in good earnest. In order to secure a regular and abundant supply of good vegetables, the garden must be put in a thorough condition at once. Let it, however be remembered, that the soil should never be stirred, nor any seed planted while the ground is wet; in fact it must be dry enough to crumble easily when raked over.

Plant a few Melons, Squashes or Cymbilins, Cucumbers, Snap-beans, &c., protecting the young plants when needful. They may, possibly, be cut down, but to have early vegetables, we must plant early, and risk the result, using what precautions we may. Plant all sorts of aromatic and pot herbs; Carrots, Parsnips and Turnips intended to produce seed—they should have been hung up in some dry place in December. Another sowing or two of Spinach may be made in soil rich enough to force it, as it will quickly run to seed. More Peas should be sown for succession; the same varieties sown last month, as also any of the taller sorts. Sow also, Early Corn, Radishes, Lettuce, Early and Summer Cabbage, and the main crops of Beets, Carrots, Parsnips and Salsify. Continue to set out early Cabbage plants.

Set out the Peach, the Plum, the Apple, the Pear, the Quince, the Pomegranate, the Grape, the Strawberry, the Raspberry, and all other desirable kinds of fruit and ornamental trees and vines. Examine Peach trees for the worm, and Apple trees for the borer, and dig those depredators from their hiding places with the sharp end of your knife. Heap leached ashes around your Peach trees.

## MARCH.

During a backward spring, most of the work directed to be done last month should more properly be done in March. If any early Cabbage plants yet remain in the beds, set them out the first favorable weather; the Buttersea will succeed the Early York. Okra must be got in by the middle of the month. If seed is plenty, sow in drills, four feet apart in rich ground, if scarce, drop a half dozen seed in hills three or four feet apart. When large enough, they must be thinned out to a single plant. In fact, its cultivation is precisely the same as that of Cotton.

Sow more Cabbage seed to head in the summer. Flat Dutch is the best. Thin out Turnips as soon as they have four leaves, leaving them at the distance of six inches apart, and sow more Turnip seed. Early White Dutch and Red Topped Dutch are the best for spring use. If you did not sow Onion seed (black) last month, do it at once; they will come into use in the latter part of the summer, when all that were raised from sets or buttons are gone. If you did sow Black Onion seed in September, it can now be transplanted. Sow Carrots, Beets, Parsnips, Salsify, Lettuce, Radishes, Thyme, Parsley and Rape, (for early greens.) Plant all in rows fifteen inches apart. Sow, also, a little spot with Celery, and protect them from the sun. When Cherry trees are in bloom, plant Snap Beans; and when Apple trees are in flower, plant Squashes. (Scallop Squash is the best) in hills three feet apart; also Cucumbers and Muskmelons, six feet apart; the Nutmeg and Citron melons are very fine, and the earliest; Beechwood Melon is very superior, but a little later. All the vines are greatly benefited by guano or poultry manure. At the same time, also, sow Tomatoes and Egg Plants. Asparagus will now begin to sprout; don't suffer any to run to seed, but cut all down. Cabbages which have been set out, and are starting to grow, should, once a week, have a watering of liquid manure—a shovelful of chicken manure, dissolved in ten gallons of water, will be found an excellent fertilizer for them.

All vegetables, that already have a start, should have a good hoeing by the latter part of this month.

Irish Potatoes should now be planted in drills, three feet apart, and covered with a thick layer of pine straw or leaves.

## APRIL.

Attend to all work not performed last month without delay. Set out all Cabbage plants you may have, and sow more Cabbage Seed to head in the summer. Flat Dutch is the best. Thin out Turnips as soon as they have four leaves, and sow more turnip seed. Early White Dutch and Red Topped Dutch are the best for spring use. Also sow White Norfolk Turnip, it will grow much larger than the former and succeed them.

Plant a full crop of English Peas for a succession. For a late crop we think the Blue Imperial and the Prussian Blue the best; when planted at the same time as the Extra Early, they will come in three weeks later. Sow Carrots, Beets, (Extra Early is the finest,) Parsnips, Salsify, Radishes, Thyme, Parsley and Rape, (for early greens.) The White Belgian Carrot stands our hot summers best. Also sow Mangel Wurtzel; it will be found very good for late use, when the other beets are gone. Plant all in rows 15 inches apart. When cherry trees are in bloom, plant Snap Beans. Early Valentine is an excellent variety, and we are inclined to recommend it in preference to all others. When Apple trees are in flower, plant Squashes (Scallop Squash is the best) in hills 3 feet apart; also Cucumbers and Muskmelons 6 feet apart.

Common Corn and Chinese Sugar Cane, for cutting green and for winter forage should also be sown plentifully during the present and the next month. Sow, also, Egyptian Millet, but do not let it come near the Chinese Sugar Cane, or you will ruin the latter as a Sugar plant.

*Sweet Potatoes.*—Plant your main crop of sets and draws this month.

Try the level system. Reason and experience both teach its superiority. But if you plant in hills and ridges, plow the soil very deep, and throw them up broad and flat on the summit, so that they may catch and retain as much moisture as possible. Potato "draws," or any similar plants, may be safely set out, even in dry weather, by dipping the roots in a thick batter of black woods-mould or surface soil and water, as heretofore described.

The vigilant gardener will keep his eye upon the weeds. An hour's work now will equal a day's when the ground gets foul.

This is the month to thin out the vegetables. Thin well at first and then go over and thin again and again. Save all the ashes, soap suds, and hen manure about the premises, to apply to the growing crops in the garden. Every family that keeps twenty hens, may, with the assistance of the soap suds and ashes that are generally thrown away, fertilize a garden spot in the year as much as would a ton of guano.

## MAY.

Do not fail to secure large beds of Drumhead, Savoy, &c., Cabbage and Brocoli plants, sowing during showery weather. These will stand in the seed-bed until August, in the meantime the ground intended for them should be thoroughly dug or plowed and manured. Continue to set out Sweet Potato sprouts or cuttings of vines in favorable weather.

Transplant Egg Plants, and hill up Bush Beans.

Work carefully around Melons and Cucumbers, with a pronged hoe. Continue to plant Okra, Squashes and Melons of the different varieties, Cucumbers, Lima (or Butter) Beans, Sweet Corn. Transplant the Tomato, Pepper, Cabbage, Cauliflower, Celery, &c. Plant Carrots, Beets, Salsify, Parsnips &c., for a succession.

Work your vegetables carefully, and be sure not to injure the roots with the hoe. Water in dry weather, removing a portion of soil just around the plant before watering, and replacing it afterwards to prevent evaporating from the surface.

The Strawberry patch should receive a good working with pronged hoes, to avoid injuring the roots. After thus loosening up the soil replace the mulching and there will be little trouble with the weeds for the remainder of the season. If cultivating solely for fruit, the runners must be scrupulously kept down.

Weeds will now begin to infest your gardens, and must be ruthlessly destroyed at their first appearance.

Destroy caterpillars' nests wherever found on your fruit trees. If the branches are crowded or overladed with thickly set fruit, thin out one-half of it and the remainder will be enough better to pay for the trouble.

Dust over the Plum and Nectarine trees with a mixture of quick lime, ashes and sulphur while the dew is on the leaves to destroy the curculio.

## JUNE.

Little can be done the present month in the garden, with the exception of mulching, weeding and watering.

Irish Potatoes can be planted and heavily mulched; they will give a fair crop in October. Plant Watermelons for a succession.

## JULY

Every preparation should be made for a brisk onset, next month, to insure a good fall and winter garden. The ground must be cleansed off, manured and well ploughed and harrowed, or dug.

By commencing very early in the morning, resting a couple of hours in the heat of the day, and working a little later, your teams and hands will accomplish more than if kept constantly going.

## AUGUST.

A good winter garden will depend much on what is started this month therefore grudge not a little labor in watering and mulching. Save the seeds of all earliest and best vegetables. Remember not to dry melon or cucumber seeds in the sun, it destroys their vitality; spread them in thin dishes and dry in the shade. Onions that have not yet been pulled should now be taken from the ground, dried in the shade, spread on a cool floor, or tied in bunches and hung where the air can circulate around them. Pot and medicinal herbs should now be gathered; dry in the shade and put away in proper bags for future use. Seeding weeds will now demand the gardener's attention. One root of parselane, now full of seeds, will keep a whole garden next season full of weeds. Remember the old adage, "an ounce of prevention is worth a pound of cure."

All plants of the Cauliflower, Broccoli or Cabbage family may be set out the latter part of this month for fall and winter use. Continue to transplant Celery. Full crops of the different kinds of Turnips should be sown during the month, as directed above. Sow seeds of Beets, Salsify, Carrots, &c., for winter use—shading the ground by a slight "brush arbor," from the hot sun. Radishes, Spinach, Lettuce, &c., may still be sown, and Snap Beans planted for pickles. Plant, also, Melons and Cucumbers for mangoes and pickles. Keep down all weeds—use the hoe and water freely. Plant a second or fall crop of Irish Potatoes and Peas, mulching both heavily with leaves. The Purple Egg Plant, Tomato and Lima Bean may be planted for a late crop and will come yet, with "favorable seasons."

## SEPTEMBER.

We can only refer to the instructions given last month, to be continued during the present one. After the first week it will not do to risk large plantations of Peas, Sweet, or other Corn, or Snap Beans. Sow Early York and other Cabbages, to be set out in January. They may require a little protection during severe weather. Sow Turnips, Mustard, &c.

## OCTOBER.

As frosts are to be expected about the last of this month, few seeds can now be sown with safety. Amongst the few that may be sown are Onions, Leeks, Parsnips, Turnips, Mustard, Radishes, Early York and other spring Cabbages, in beds in which they may be protected, as also Lettuce, Cress, Celery, Parsley, &c. If any Drumhead or Savoy Cabbage, Broccoli, Endive or Lettuce plants not yet set out, attend to them first showers. Celery, planted in August, will now require to have the earth frequently stirred around it and a little earth carefully drawn around it, when dry; if wet it will rust. During the first two or three earthings, the leaf stem must be held together and erect with one hand whilst the earth is pressed to them with the other. Haul plenty of manure on your garden, have it well spaded, burying under all enriching animal or vegetable matter. Transplant Broccoli, Cabbages, Celery, Collards, &c. Work and manure your Asparagus bed, not forgetting to give them a liberal top dressing of salt before spring. Save all old bones, soap suds, dead leaves, decaying vegetables, &c. and make up into compost heaps for future use. Bushes of Egg Plants and Tomatoes may be taken up before frost and hung up under a shelter—they will continue to ripen the

nit set upon them when those left in the garden are blackened and rotted by frost. November, December and January are the best months for planting trees, vines, &c.

**CABBAGE SPROUTS.**—Very few people take half the pains they ought with Cabbages. When they are cut, no matter how—the stumps are left to bring sprouts no matter when, or how many. Now, the fact is, that when sprouts begin to come they should all be rubbed off but the best, or at best two, but if there be only one left to grow on each stump it will grow larger and better, and be occasionally as good as the first head that was cut, instead of which a multitude of small ones are allowed to grow, not any of which bring good hearts, and all are, for the most part, but a poor apology for greens. When a Cabbage is cut, the leaves should be cut off the stem as soon as the buds of the stump begin to grow, rub off or cut all that is not wanted, leaving one of the strongest and best to grow into a head, which it will do in an incredibly short time; equalling, and most frequently selling the first head itself in flavor and appearance. This is adopted for miles more than market gardens; because there is some trouble in rubbing taking off the useless shoots; but it is well worth while in every case.

### NOVEMBER.

Sow Cabbages, Turnips, Parsnips, Lettuce, Carrots Radishes, &c., &c. Man plenty of manure on your garden, have well spaded, burying under all existing animal or vegetable matter. Transplant Brocoli, Cabbages, Celery, "Collards," &c. Dress and manure your Asparagus beds, not forgetting to give them a liberal top-dressing of salt before spring. Save all old bones, soap-suds, dead leaves, decaying vegetables, &c. and make up into compost heaps for future use. Plough and subsoil your ground for the planting of young orchards and nurseries, and provide a supply of roots and stocks for the propagation of all new and desirable varieties of fruit adapted to our southern climate.

In transplanting trees, before taking a mark the side that was at the north so as to place it in the same position. If all would give strict orders to mark the north side of trees with chalk before they were taken up, and when set out to have the tree put in the ground with the north side to the north in its natural position a larger proportion would live. Ignoring this law of nature is the cause of so many transplanted trees dying. If the north side is exposed to the south, the heat of the sun is too great for that side of the tree to bear and therefore it dries up and decays.

### DECEMBER.

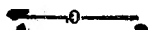
But little can be done in gardening. In pleasant days manure, spade and prepare the ground for the spring planting. Seed sown now are as good as thrown away.

The cattle demand our constant care during this inclement season; and their appearance is no bad index of the character of their owner. Does not a lean, half starved, unsheltered cow convict her owner of inhumanity? Dry, warm stables are matters of prime importance for horses and neat cattle. If the barn is not already tight, it should be made so before extreme cold weather sets in. A few dollars laid out upon boards and shingles in stopping crevices will be much better economy than in buying extra food. Comfortable stabling will make a difference of five dollars in the expense of wintering a cow. A tight barn saves one-fourth of the fodder. A cow is often left to seek shelter behind a fence and is nearly frozen in the sleet which is forming a cake of ice upon her hide. In the morning she comes up shivering and nearly dead to get a little fodder, and is expected to give a good lot of milk. One cow properly treated will give more milk than half a dozen uncared for.



1864

1864



THOS. RICHARDS & SON,  
**BOOK-SELLERS.**

**STATIONERS,**



**Commission Merchants.**

**AUGUSTA, GA.**

Periodicals, and other Printed Books,

**BOND**

In any style that may be desired, with promptness and

dispatch

